

# THE COON BUG *OXYCARENUS LUCTUOSUS* AND MALVACEAE

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The introduced European tree mallow *M. dendromorpha* appears to be eliminating the native *M. australiana* on the small seabird islands off Perth. The only substantial predator of the plants that we found during three years of research on these islands was a species of Coon Bug *Oxycarenus luctuosus*. Unfortunately it feeds on the native species as well all three alien species on the islands - *M. dendromorpha*, *M. parviflora* and *M. linnaei*.

The developing and ripe fruit of the plants are covered with these bugs during spring. As the season progresses the insects may form plaques of hundreds of individuals on the branches of *M. dendromorpha*. Seeds collected in December/January from the ground underneath *M. australiana* had virtually all been invaded and destroyed (only 1 in 500 seeds inspected appeared complete).

The eggs of the bug, less than a millimetre in length, are laid under the sepals enclosing the seeds and on the leaves of the plants and hatch after 7 - 10 days into wingless red-coloured nymphs (see illustration). The immature bugs develop through a number of moults to the adult,

winged bug 3 - 4 mm long which is mobile and able to hop or fly for short bursts of a few centimetres. It is possible that they have a role as pollinators as flowers usually adjoin the developing fruit. During the dry season the bug population can decline to a low level, still including the full range of overlapping generations. Where *Malva* fruit is not available they can transfer their allegiance to other hosts, and be found on groundcover or the young may be

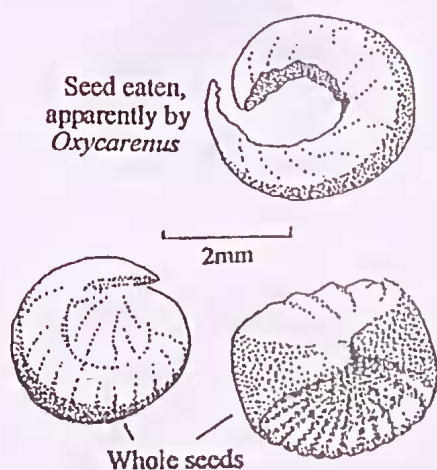


Figure 1. Seeds of *Malva linnaei* from plant infested by *Oxycarenus luctuosus*

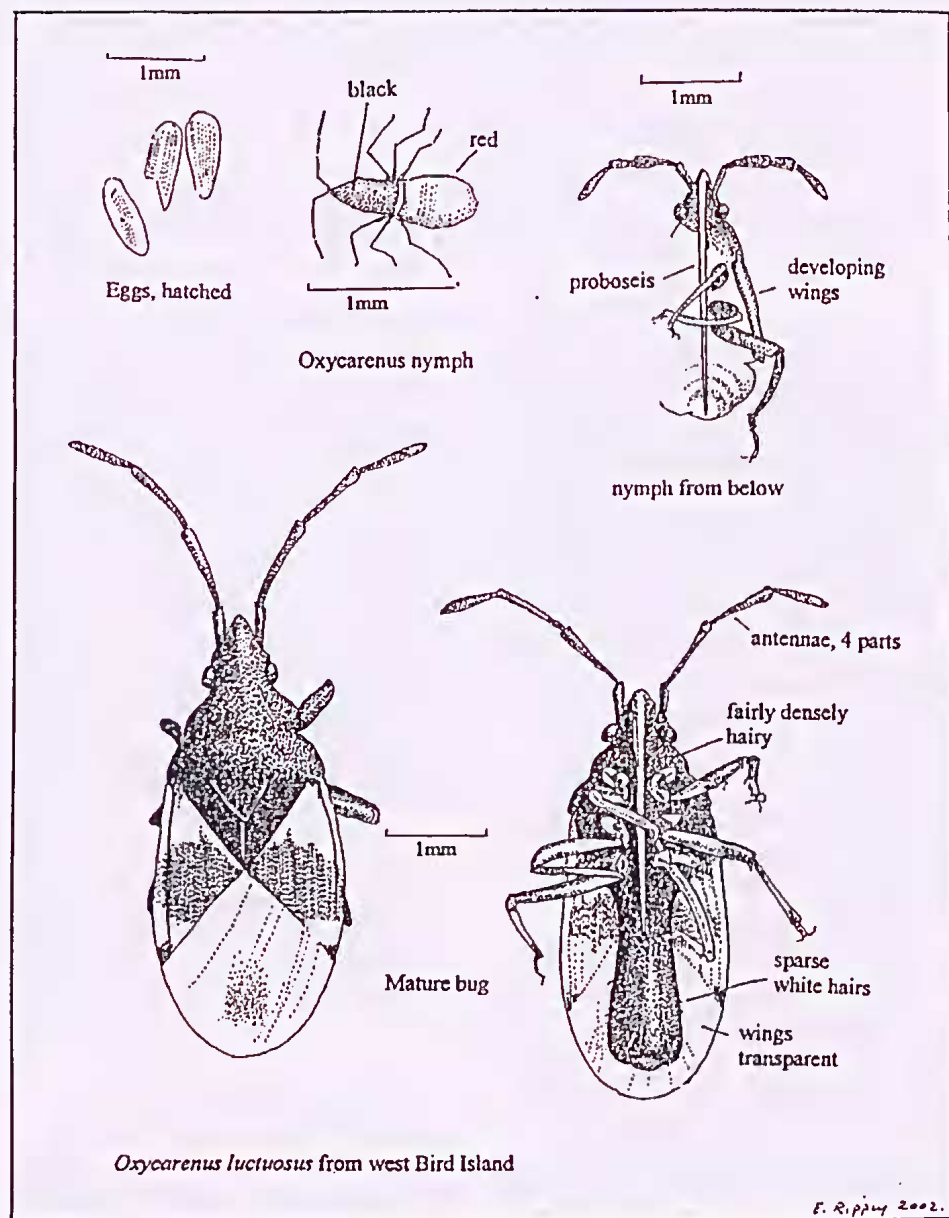


Figure 2. *Oxycarenus luctuosus*

seen in the soil. When there is sufficient moisture the population builds up once more. The effects of these insects on

fruit can be seen where there are large numbers of bugs or when they are there for a prolonged period. Usually fruits close to

ripening are attacked, the insects insert their proboscis and suck out the juices, leaving dried discoloured patches. Fruit may be damaged visibly or rendered infertile with little external evidence.

Adults and immature stages of this bug have an unpleasant odour when disturbed. The insect is native to Australia and occurs throughout the continent although most common in tropical zones.

Little work has been done on this genus in Australia apart from taxonomic descriptions. Other members of the genus are a problem for growers of cotton, peanuts and sunflowers and have been more widely researched.

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## REFERENCE

Director, South Australian Museum (1957-59). *Records of the South Australian Museum* Vol XIII: 362-366.